

Title (en)
THREE-DIMENSIONAL MODELING DEVICE AND METHOD OF MANUFACTURING THREE-DIMENSIONAL SHAPED ARTICLE

Title (de)
DREIDIMENSIONALE MODELLIERVORRICHTUNG UND VERFAHREN ZUM HERSTELLEN EINES DREIDIMENSIONALEN FORMARTIKELS

Title (fr)
DISPOSITIF DE MODÉLISATION TRIDIMENSIONNELLE ET PROCÉDÉ DE FABRICATION D'UN ARTICLE DE FORME TRIDIMENSIONNELLE

Publication
EP 4082754 A1 20221102 (EN)

Application
EP 22170708 A 20220429

Priority
JP 2021077276 A 20210430

Abstract (en)
A three-dimensional modeling device (100) includes a plasticizing section (30) for plasticizing a material to generate a shaping material, a stage (300) on which the shaping material is stacked, a nozzle (61) which has a nozzle opening (62), and ejects the shaping material from the nozzle opening toward a modeling area on the stage, a transfer mechanism section for changing a relative position between the nozzle and the stage, and a heating section (600) having a heater (610) and a heating member (620) for heating the shaping material stacked in the modeling area with heat supplied from the heater. The nozzle opening is located between the stage and the heating section in a stacking direction of the shaping material, the heating section is configured so that a relative position to the stage changes together with the nozzle, and the heating member covers at least the modeling area when viewed along the stacking direction.

IPC 8 full level
B29C 64/106 (2017.01); **B29C 64/118** (2017.01); **B29C 64/227** (2017.01); **B29C 64/232** (2017.01); **B29C 64/236** (2017.01); **B29C 64/295** (2017.01); **B29C 64/393** (2017.01); **B33Y 30/00** (2015.01); **B33Y 50/02** (2015.01)

CPC (source: CN EP US)
B29C 64/118 (2017.08 - EP US); **B29C 64/20** (2017.08 - CN); **B29C 64/209** (2017.08 - CN US); **B29C 64/227** (2017.08 - EP); **B29C 64/295** (2017.08 - CN EP US); **B29C 64/336** (2017.08 - CN); **B29C 64/386** (2017.08 - CN); **B29C 64/393** (2017.08 - EP); **B33Y 10/00** (2014.12 - US); **B33Y 30/00** (2014.12 - CN EP US); **B33Y 40/00** (2014.12 - CN); **B33Y 50/02** (2014.12 - CN EP); **B29K 2101/12** (2013.01 - US)

Citation (applicant)

- JP 2021077276 A 20210430
- JP 2017523063 A 20170817

Citation (search report)

- [XAYI] US 2018200955 A1 20180719 - HOELLDORFER ANDREAS JOHANN WALTER [DE], et al
- [X] JP 2019064090 A 20190425 - HIT RES CORP
- [Y] EP 3756856 A1 20201230 - SEIKO EPSON CORP [JP]
- [A] CN 206154726 U 20170510 - UNIV HUBEI TECHNOLOGY

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4082754 A1 20221102; **EP 4082754 B1 20240417**; CN 115256930 A 20221101; JP 2022170965 A 20221111; US 11884013 B2 20240130; US 2022355544 A1 20221110

DOCDB simple family (application)
EP 22170708 A 20220429; CN 202210468652 A 20220429; JP 2021077276 A 20210430; US 202217660943 A 20220427